REMARKS/ARGUMENTS

The office action of March 13, 2003 has been carefully reviewed and these remarks are responsive thereto. Reconsideration and allowance of the instant application are respectfully requested.

Claims 26-50 remain in this application. Claims 26-50 are rejected. Claim 50 is allowed.

Claim 45 stands rejected as indefinite for use of the term "such as." Claim 45 has been amended to delete the "such as" phrase.

Claims 26, 30-33, 36, 37 and 41-45 stand rejected as anticipated by Belousov et al. (US 6,328,342). It is noted that this patent corresponds to WO 97/05580 published February 13, 1997.

Belousov is directed to an information carrier having a polymeric structure, containing pits and perforations. The carrier forms a protective film element for the protection of articles and documents from counterfeiting and copying and is formed by a polymeric structure. The information carrier may be part of a plastic card such as a credit card or as a film applied to protect papers and other documents. The pits and perforations are formed by heavy ion irradiation, UV radiation, and etching. See column 10, lines 38+. After the holes are made, they can be refilled with another material to make the pattern more visible to the naked eye.

Independent claim 26 is directed to a forge-proof document having holes produced by a laser. At least some of the perforations forming part of the perforation pattern extend over only a part of the thickness of the document at the position of the perforation, and that the thickness of the remaining part of the document at the position of the perforation is modulated in accordance with the image to be displayed. This allows the document to be held up to the light and the holes appear gray. The shade of gray depends on the depth of the hole or the angle of the hole. The document may comprise plastic, paper, or textiles, but is manufactured from a material, which transmits light to a limited extent.

Belousov does not teach or suggest a document having holes in which the holes appear gray when held up to light in accordance with claim 26, nor does Belousov teach that such holes are formed by a laser. Belousov describes polymeric materials such as plastic films used to

protect documents or credit cards. Holes in these types of polymeric materials as used by Belousov would not produce holes in which the holes appear gray when held up to light in accordance with claim 26. Belousov thus does not anticipate claim 26 or dependent claim 30.

Claim 31 is directed to a forge-proof document comprising a security feature in the form of a perforation pattern which represents an image and which displays gray tones when viewed against a bright background wherein material is arranged in the perforations. Belousov does not teach a document which displays gray tones against a bright background. Hence Belousov does not anticipate the document of independent claim 31 or dependent claims 32-33, 36, 37 and 41-45. Withdrawal of this rejection is requested.

Claims 27-29, 34, 35 and 38-40 stand rejected as unpatentable over Belousov.

Independent claim 27 is directed to a document having security feature in the form of a perforation pattern which displays gray tones when viewed against a bright background, wherein the perforations are produced by a laser and wherein at least some of the perforations forming part of the perforation pattern extend at an angle differing from 90° relative to the main plane of the document.

As discussed above, Belousov does not teach a laser treated document nor does Belousov teach the security feature of a perforation pattern, which displays gray tones when viewed against a bright background. Thus Belousov does not teach or suggest the document of independent claim 27 or dependent claims 28-29.

Belousov does not teach a laser treated document in accordance with independent claim 31 for the reasons discussed above. Belousov does not teach a document which displays gray tones against a bright background. Moreover, Belousov does not suggest replacing the polymeric carrier to protect documents with a document that contains perforations that display gray tones against a bright background. Thus, Belousov does not render obvious dependent claims 34, 35, and 38-40. Withdrawal of this rejection is requested.

Claims 46-49 stand rejected as upatentable over Belousov in view of Andriash et al. (US 5,550,346). Claims 46 and 47 depend from independent claim 31. Belousov does not teach or

suggest the forge-proof document of claim 31 for the reasons discussed above. Andriash does not remedy the defects of Belousov.

Andriash is directed to a laser apparatus to produce a *regular* array of perforations or holes in sheet material. See figures 3-5 showing regular arrays of holes. There is no teaching or suggestion of creating perforations that do not extend through the entire thickness of the sheet. Andriash is not directed to making forge-proof or security documents. Moreover Andriash does not teach or suggest producing a document having a perforation pattern which represents an image and which displays gray tones when viewed against a bright background wherein material is arranged in the perforations. Andriash is simply directed to making regular arrays of holes.

One skilled in the art would not have modified the polymeric carrier of Belousov for the protection of articles and documents from counterfeiting and copying based on the laser sheet perforator of Andraish. Even if combined, neither document teaches or suggests producing a document having a perforation pattern which represents an image and which displays gray tones when viewed against a bright background. There is no teaching or suggestion that the laser device of Andraish, designed to produce arrays of holes, could have been modified to produce to patterns desired by Belousov.

In regard to method claims 48 and 49, Belousov does not teach or suggest forming a perforation pattern in a forge-proof document comprising a security feature in the form of a perforation pattern which displays gray tones when viewed against a bright background, nor does Belousov teach or suggest the use of a laser. Andriash's device to produce patterned arrays of holes with a laser does not remedy the defects of Belousov for the reasons discussed above. Withdrawal of the instant rejection is requested.

CONCLUSION

It is believed that no fee is required for this submission. If any fees are required or if an overpayment is made, the Commissioner is authorized to debit or credit our Deposit Account No. 19-0733, accordingly.

All rejections having been addressed, applicant respectfully submits that the instant application is in condition for allowance, and respectfully solicits prompt notification of the same.

Respectfully submitted,

BANNER & WITCOFF, LTD.

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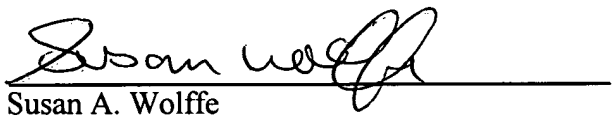
By: 

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